

REMARKS:

I. STATUS OF THE CLAIMS

In the outstanding Office Action, claims 1-28 were rejected.

In accordance with the foregoing, new claims 29 and 30 have been added, and claims 1-16 have been cancelled without prejudice. No new matter has been added. The rejections are traversed below. Thus, claims 17-30 are pending and under consideration.

II. REJECTION UNDER 35 U.S.C. §102(b):

Claims 1-28 are rejected as being anticipated by U.S. Patent No. 6,014,457 (Kubo et al. et al.).

Applicants respectfully traverse this rejection of claims for at least the following reasons.

Independent claims 17, 21 and 25 recite, "obtaining a preliminary lightness conversion amount in accordance with a differential value in lightness between said object color and said optimum color" and "obtaining a practical lightness conversion amount by compensating said preliminary lightness conversion amount so as to decrease said preliminary lightness conversion amount commensurate with the largeness of said preliminary lightness conversion amount". Further, independent claims 17, 21 and 25 also recite, "obtaining a lightness conversion factor based on said practical lightness conversion amount, said object color and said optimum color" for converting the input color image in lightness.

Kubo et al. discusses converting input color image signals representative of image data obtained by scanning a photo-film or using a digital still camera into an image recording signals to be sent to an image forming apparatus, such as a color printer (see, col. 1, lines 6-10). In Kubo et al., a color converting characteristic is defined by color converting parameters determined based on input RGB data and on a color reproduction characteristic, such as a color reproduction range of the image forming apparatus, and the RGB data is converted into data in a $L^*a^*b^*$ color space (see, col. 6, lines 36-45).

Kubo et al. does not teach or suggest, "obtaining a preliminary lightness conversion amount in accordance with a differential value in lightness between said object color and said

optimum color” and “obtaining a practical lightness conversion amount by compensating said preliminary lightness conversion amount so as to decrease said preliminary lightness conversion amount commensurate with the largeness of said preliminary lightness conversion amount”, as recited in each of independent claims 17, 21 and 25.

Further, Kubo et al. does not teach or suggest, “obtaining a lightness conversion factor based on said practical lightness conversion amount, said object color and said optimum color” for converting the input color image in lightness, as recited in each of the independent claims 17, 21 and 25.

For at least the above-mentioned reasons, Applicants respectfully submit that claims depending from claims 17, 21 and 25 are also patentably distinguishable over Kubo et al. The dependent claims are also independently patentable. For example, as recited in claims 18, 22 and 26, the lightness conversion amount is obtained “such as to approximate a predetermined value as said preliminary lightness conversion amount increases”. For example, the present invention determines a value of a practical lightness conversion amount to approximate a constant value LIM (e.g., 30) such that even when the preliminary lightness conversion amount is remarkably large due to a severe-against-the-light image, the maximum conversion amount is limited to a constant value LIM so that intended lightness conversion is performed without impairing the balance of lightness of the whole image.

Therefore, it is respectfully submitted that the rejection of claims 17-28 is overcome.

III. NEW CLAIMS:

New claims 29 and 30 are added to recite a method and apparatus for image processing, including “designating an object color of an input color image and assigning a stored optimum color corresponding to the object color” and “converting the input color image in accordance with a differential value of lightness obtained between the designated object color and the assigned optimum color”, where the differential value is “adjustably maintained within a predetermined maximum conversion value”.

It is respectfully submitted that new claims 29 and 30 are patentably distinguishable over Kubo et al.

IV. CONCLUSION


In view of the above, it is respectfully submitted that the application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

If any further fees are required in connection with the filing of this response, please charge such fees to our Deposit Account No. 19-3935.

Respectfully submitted,

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